



Supplier Quality Manual

ADMWI-0003.01

Revision 9

(09/30/2024)

1.0 Introduction

This Supplier Quality Manual (SQM) has been created to assist our suppliers in understanding the Quality expectations and requirements for products and/or services supplied to Cadrex. This Supplier Quality Manual will communicate the operating principles, general expectations, and procedures of Cadrex. Adherence to the guidelines described in this manual is required by all Cadrex suppliers. This manual describes the acceptance of any and/or all purchase orders constitutes acceptance and commitment on behalf of the supplier to comply with this manual's content. These guidelines are provided as supplement to, and do not replace or alter, any purchase agreement terms and conditions which are included as requirements of applicable drawings, electronic part models, specifications, and other contractual documents. minimum requirements for which the supplier has responsibility. However, system improvements that exceed the requirements specified within this manual are always encouraged.

2.0 Purpose

The purpose of this document is to establish the minimum quality requirements that suppliers engage with Cadrex must adhere to and shall apply to any supplier/vendor of purchased parts, services and/or raw materials to Cadrex.

3.0 Scope

This document may be referenced in the Quality sections of the Quote Package, the Purchase Contract or may appear as an addendum. Our suppliers are a key ingredient in achieving these objectives through their own commitment to continual quality improvements.

- 3.1** Cadrex's goal is the total elimination of any incoming inspection on materials produced by all suppliers. In cases where incoming inspection is required, due to the critical nature of the product, the supplier will be asked to support this effort to ensure defect-free product prior to shipping to Cadrex. The Cadrex Sourcing Team will continue to work with the supplier to eliminate the need for incoming inspection. Any deviation from this document shall be defined, agreed upon, and documented by the Cadrex Sourcing Team.

Cadrex purchased products and services will fall into several different categories. Catalog or off-the-shelf items will be exempt from the requirements of the sections 7.3 thru 7.7 of this document. The Outside Process Services such as painting and plating maybe required to provide Material or Process certification as stated on the Cadrex purchase order. These products and services will still be subject to receiving inspection at Cadrex based upon the individual part characteristics and Cadrex Quality Department receiving quality documents. Purchased custom products such as sheet metal, machined, cast and molded components will require full compliance to all sections of this document unless otherwise agreed upon.

4.0 NDA Non-Disclosure Agreement

All suppliers chosen to work with Cadrex are required to sign and adhere to the appropriate version of Cadrex's Non-Disclosure Agreement. Information needed to quote, purchase and or obtain services related to manufacturing products or provide secondary operation services is to be kept confidential. It is also required that the chosen supplier will not contact Cadrex's end customer directly. Any information transfer necessary in either direction must be transmitted through a Cadrex representative.

5.0 On-Time Delivery

Cadrex requires all suppliers to meet our on-time delivery requirements. To further clarify this, we consider unauthorized early (more than 3 business days) and unauthorized late and partial deliveries (more than 1 business day) or over shipments to be unacceptable. The quantity shipped per order or release cannot vary from specified quantity without prior written consent.

6.0 Supplier Evaluation and Selection

Cadrex's supply base will consist of organizations supportive of our business needs. Criteria for evaluation and selection of suppliers for placement on Cadrex's Approved Vendor List is based on the suppliers' ability to consistently deliver defect free products and/or services, meet our on-time delivery requirements, be cost competitive and be responsive to Cadrex's needs.

6.1 Supplier Monitoring

The performance of Cadrex's approved suppliers will be monitored on a regular periodic basis. Suppliers determined to be key to Cadrex based upon the critical nature of the product or service being purchased or the overall dollar value of product or services purchased will undergo a periodic supplier review.

Suppliers will be rated in seven different categories which include On-Time Delivery, Quality, Lead time, Pricing, Customer service, Payment terms, and Code of conduct and Risk management.

Suppliers may also be reviewed at any time based on their overall performance or program specific needs. Suppliers that fail to consistently meet the necessary rating may be subject to the following in either a formal or informal manner:

- Root cause, corrective and preventive action evaluation.
- Limited access to new business.
- Removal from Cadrex's Approved Supplier List.

7.0 Counterfeit parts

All raw material, product and services provided must match the exact specifications called out since the initial quote. In the event, that there is a variance, suppliers must notify Cadrex prior material delivery for approval.

Suppliers will ensure that all raw material, product, and services provided to Cadrex meets product specifications. Any suspected counterfeit material or part must be reported to Cadrex within 24 hours or sooner.

Suppliers will also assure training is conducted regularly to their associates, and it is documented by a qualified individual. This training must meet the appropriate QMS, and any specific requirements required by Cadrex including, but not limited to, the communication of prevention of counterfeit parts, ethical behavior and contribution to product safety and conformity.

8.0 Supplier Quality Requirements

8.1 Quality Management System

Suppliers of Cadrex are requested to be compliant with the ISO 9001:2015 International Quality Standard or the latest released revision of this standard or demonstrate a quality system equivalent or better. In addition, we encourage our suppliers to seek a third-party accreditation. The suppliers' Quality Management Systems documentation shall be made available to Cadrex for review upon request. Cadrex and its customers or any applicable regulatory authority shall have the right to enter the suppliers' facility to perform inspections or surveillance audits to verify the quality of work, review records and to ensure compliance with the contract. When determined necessary, this access requirement shall be flowed down to Cadrex's suppliers chosen sub-tier sources if Cadrex contracted work or materials are affected.

8.2 Cadrex Workmanship Standard

Parts produced for Cadrex must meet at a minimum the requirements documented in the Cadrex Mechanical Workmanship Standard. Detailed information provided on part drawings or purchase orders will take precedence over the workmanship standard QAWI-0036.

8.3 Material Certification

When specified, Cadrex has contracted with its suppliers to assure the material being used meets or exceeds all Cadrex's requirements. Arrangements will be made for Cadrex to either provide this material directly to its suppliers or be purchased by our chosen suppliers from our contracted material provider. Cadrex designated material must be used unless written approval is provided by Cadrex prior to production release. When specified, a copy of the material's Certificate of Conformance must be provided with each shipment of product and attached to the Inspection Records as detailed above.

8.3.1 RoHS and REACH Compliance

Unless authorized in writing, Cadrex requires all products and services provided to Cadrex and its subcontract suppliers to meet the latest revision of both REACH 209 and the

RoHS3+Phthalates EU directives. These directives are adjusted periodically by the EU governing bodies. Therefore, it is the responsibility of the Cadrex supplier, its subsidiaries, and subcontract suppliers to assure they conform to the latest revisions, amendments, and supplements of these directives as they relate to the products and services provided to Cadrex.

8.4 First Article Inspection

Prior to production release, when indicated on the Cadrex Purchase Order, each part will undergo a First Article Inspection by the supplier. An FAI is required for all physical components that will ultimately be resold to a Cadrex customer. Catalog type items, raw material such as sheet metal and raw plastic resins, tool and die or mold supplies and those considered MRO (Maintenance, Repair and Overhead) product are exempt from a required FAI. This inspection will include every dimension, note, and feature on the Cadrex supplied part drawing. A copy of these inspection results will be supplied to Cadrex along with a minimum of three samples of each part prior to production. If multiple parts are purchased as an assembly, a minimum of three individual parts as well as an assembled sample must be provided. Unless otherwise specified, full-scale production should not begin until Cadrex has released the product for production. At times, Cadrex will supply only electronic models without actual part drawings. An FAI will still need to be completed and sent to Cadrex upon completion as described. The supplier will be responsible to provide a part drawing as generated from the electronic model for use on the supplier production line and an FAI report containing at a minimum, dimensional overalls and those dimensions that would appear to be critical to function.

In the event that a product is one year old or more a revalidation inspection might be required.

8.5 Product/Process Approval

To reduce the time necessary for production approval, Cadrex may have a representative at the supplier's facility during the tryout/FAI period. This representative will be authorized to issue an immediate production release based on the inspection results. Documented inspection results as well as samples will still need to be provided to Cadrex for verification purposes.

8.6 Inspection Records

Documented in-process inspection results as identified below must be provided to Cadrex with each shipment of product. Records must be maintained in a manner that is traceable back to Cadrex's specific purchase order. When specified, traceability to the raw material lot from which it was produced must also be maintained. An electronic copy of these results must be provided with each shipment and placed in the Supplier/Cadrex shared "Dropbox" folder. Electronic files must be labeled to include the

Cadrex Part Number, Cadrex PO Number and Shipment Date. At a minimum, inspection records are to include (1) all dimensions, (2) features and (3) notes as listed on the Cadrex supplied quality plan for each individual and assembled part being produced. The quality plans provided should not be considered an all-inclusive document. Suppliers are expected to review and add to these quality plans as they fit into their individual processes. If no quality plan has been provided, in-process inspection results based on the overall dimensions as well as any critical to function features are to be recorded. The first piece inspection of each production order must be documented. In addition, inspections must take place with a minimum of three parts every two hours and at the beginning of each shift. Again, this is a minimum recommended frequency. The supplier's own processes and capabilities must be reviewed to determine an adequate frequency of inspections. The highest and lowest number of each sample group is to be recorded. Results are to be recorded on the Cadrex supplied In-Process Inspection form or a Cadrex approved supplier generated format that includes at a minimum, all the information contained/required on the Cadrex provided Quality Plan. When specified, these records must also include a copy of the Certificate of Conformance as well as certification for any hardware installed into the product being shipped as discussed below. All supplier generated inspection forms must be approved by a Cadrex quality representative prior to their use.

8.7 Conformance to Electronic Models

In most cases, part drawing provided will contain only general overall dimensions for some of the part features. This should not be interpreted as being the only features to be monitored for quality purposes. Other product features including but not limited to formed angles, hole diameters and flange lengths must also be monitored but not necessarily recorded. Tolerances for such features will be as provided on the part drawing for similar features. If there are no tolerances specified on the part drawing, the tolerances listed in the Cadrex Workmanship Standard are to be used as a default. The Cadrex representative is available to provide clarification should questions arise.

8.8 Advance Deviation

Occasionally, suppliers may encounter situations where product quality expectations are not fully met yet the parts may be functional for use. If this situation should occur, the supplier must submit a formal request by contacting the Cadrex Quality Representative and determine the allowable deviation limits. A Cadrex Advance Deviation Form (QAF-0023) signed by the Cadrex Quality Representative must be attached to all deviated product prior to shipment to Cadrex. Unless authorized by the Cadrex Quality Representative, any product previously rejected/sorted/reworked must be clearly identified and shipped separately from other product of the same part number.

8.9 Process Change Notification

Cadrex is to be notified in advance to request formal approval of any proposed changes to an approved process. A process is considered approved when an FAI has been submitted to and approved by Cadrex for production release. Changes that will require preapproval include but may not be limited to anything that may affect fit, form, function, material, manufacturing processes, test procedures, manufacturing locations, relocation, or replacement of equipment.

8.10 Cadrex Standard Sheet Metal Requirements

Detailed requirements that apply to coil and flat sheet procurement by Cadrex are defined in **ADMWI 0003-03 Cadrex Standard Sheetmetal Requirements**.

8.11 Supplier Code of Conduct

Cadrex is committed to upholding high standards of ethics, integrity, and social responsibility in our business operations and supply chain. In part, this is demonstrated through the compliance with the Responsible Business Alliance (RBA), formerly the Electronic Industry Citizenship Coalition (EICC) requirements, an alliance of companies who share the commitment to ensure working conditions in the supply chain are safe, the workers are treated with respect and dignity, and that business operations are environmentally responsible. We do this with close partnership of our customers and also with our supply chain.

Supplier Expectations

We expect our suppliers to share our commitment to ethics, integrity, and social responsibility. The term “supplier” means any person or entity that provides Cadrex with goods or services. As a supplier to Cadrex, you agree to the following:

1. The supplier will comply with all laws and regulations applicable to its business and operations
2. The supplier will read and comply with the Responsible Business Alliance (RBA), formerly the Electronic Industry Citizenship Coalition (EICC) code of Conduct.

For a copy of the Code of Conduct, please visit:

<https://www.responsiblebusiness.org>

3. Complete and return information regarding mineral country of origin on parts supplied to Cadrex, utilizing the most recent EICC Conflict Minerals Reporting Template, located online at: <http://www.conflictreesourcing.org/conflict-minerals-reporting-template/>.

4. Provide product related materials declarations for European Union Directive 2011/65/EU “Restriction of Hazardous Substances” (RoHS), European Union Regulation (EC) 1907/2006 on “Registration, Evaluation, Authorization, and Restriction of Chemicals” (REACH), and other requested product content legislation.

5. Participate in and support Cadrex efforts to periodically validate our suppliers’ compliance with this Policy through assessment questionnaires and validation audits.

7. The supplier will respond to all Cadrex inquiries and questionnaires in a clear, concise, and complete manner within the time period requested. This is to include, but not be limited to, queries on compliance validation and assessments.

Cadrex is excited to work with our suppliers to enable a supply chain that is high in ethics, with social, and environmental responsibility. Cadrex will actively reconsider our willingness to partner with any supplier who fails to comply with this Policy and/or the EICC Code of Conduct.

9.0 Packaging

Product is to be packaged in a manner that will prevent damage during shipment to Cadrex. Whenever possible, returnable/reusable packaging should be utilized. Details pertaining to special packaging requirements are to be reviewed during the quoting phase of the program. Once a program has been awarded, the chosen packaging method should be reviewed with the Cadrex Supplier Quality Engineer prior to its implementation. The supplier is responsible for ensuring items provided under the purchase order are packaged in such a manner that the product integrity is preserved, contamination and corrosion are prevented, no physical damage occurs, and it prevents damage, deterioration, or loss in transit. The supplier must ensure the handling and shipping methods are proper for on-time delivery without damage to the product.

Small components such as nuts, bolts and similar sized items should be packaged in reasonable quantity packages not to exceed 1000-piece counts unless prior authorization is received from a Cadrex Purchasing representative.

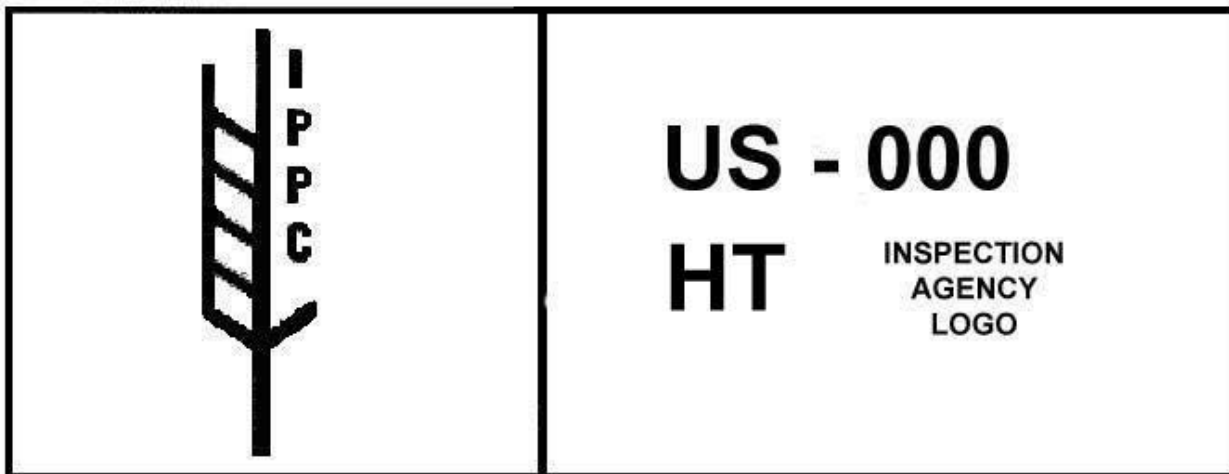
9.1 Environmentally Safe Packaging Materials

Cadrex is committed to protecting the environment. Included in this effort is the need to ensure all packaging material used for international shipment meet or exceed the standard set forth by the International Plant Protection Convention. "International Standards for Phytosanitary Measures No. 15" (ISPM-15) was created by the [International Plant Protection Convention](#) (IPPC) to address the international shipment of potentially contaminated solid wood materials. Its main purpose is to prevent the spread of insects and disease that could have a negative impact on plants and ecosystems as a result of solid wood packaging used in the international transport of goods. The standard covers vessels, aircraft, vehicles, containers, storage areas, soil, and other materials and objects that can spread and harbor pests.

Understanding treatment requirements for solid wood packaging, such as wood [pallets](#) and packaging including recycled or refurbished units, can prevent the inconvenience and cost of having shipments quarantined at international ports of entry.

It is Cadrex's Intention to fully comply with the requirements set forth in this entire standard. This being stated, the most visible and potentially overlooked expectation of this is to assure the pallet and crate material used for international shipment to and from all Cadrex facilities meet the heat treatment or fumigation requirements of the standard.

All wood pallets and crates are to have a stamp like the one shown below to verify compliance to the ISPM-15 Standard. Additional information can be found in the most current version of the ISPM-15 Standard.



10.0 Product Identification and Traceability

All products provided to Cadrex must be clearly labeled with the following information. Cadrex Part Number, Revision Level, Container Quantity and Date code. The date code is the week and year part were manufactured, starting from Jan. to Dec. of that year. Example: YYWW = 9802 (1998 2nd week of Jan.). Each container within a shipment is to be labeled. Palletized shipments and cartons with multiple containers require each individual container in the carton or on the pallet be labeled as described above.

All shipping documents including the packing slip must contain, at a minimum, the Cadrex Purchase Order which the product was shipped against, Cadrex Part Number and revision Level and the quantity of product shipped. At no time should a container contain more than one individual part number. Separate, clearly labeled containers should be used for each part number within a shipment.

11.0 First-in First-out Inventory Management

Suppliers are expected to manage their inventory of products manufactured for Cadrex in a manner that will ensure First-in, First-out inventory control. By doing this, the supplier will ensure to ship the oldest inventory first.

12.0 Return Material Authorization

This Document may contain proprietary information. This printed copy may not represent the most recent information, only electronic files are controlled.

Should the situation arise that Cadrex has determined materials received do not meet the required specifications, the supplier will be notified. If it is determined necessary to return the product to the supplier, it is expected the supplier will provide written return authorization within two business days.

13.0 Containment, Corrective and Preventive Action.

In the event a nonconformance has been identified, depending on the type and quantity involved, Cadrex may issue a CAPA ADMFR 0015.3.MX, (Corrective and Preventive Action). The supplier will need to identify the quantity and location of all suspected material as quickly as reasonably possible. The supplier will need to complete all relevant sections of the CAPA. Containment should be complete within 1 business day and short-term corrective action plan if this is not accomplished in a timely manner, future business may be jeopardized.

Root Cause analysis and 5 Why's worksheet will need to be reported to Cadrex within 7 business days of the initial notification. Additionally, Corrective and Preventive Actions will need to be reported within 14 business days of the initial notification.

The CAPA conclusion should be completed within 30 business days of the initial notification. This is a conclusion of all the findings, and a joint decision between Cadrex and supplier on what corrective actions will occur should this issue happen again in the future. Monitoring will continue for 30 - 60 days to determine whether the issue has been solved before the CAPA is closed as completed.

When determined necessary, an onsite visit by a Cadrex representative may be necessary to verify corrective and preventive actions put in place are adequate to prevent reoccurrence.

14.0 Tooling Maintenance and Repair

Cadrex will on occasion provide our suppliers with either turret punches, hard tooled dies or injection molding tooling. It is expected the supplier will take responsibility for the general maintenance of this tooling while it remains in their possession. This would include periodic sharpening and when necessary, limited form block adjustments needed to maintain angle tolerances as well as periodic cleaning. A notification is to be sent to the Cadrex Quality representative any time maintenance is performed. When more complicated tool maintenance is necessary, The Cadrex Quality representative should be consulted to determine if the tool should be returned to Cadrex for maintenance or if the needed repairs are to be completed by the supplier.

Care must be taken to not over sharpen (removing more material than necessary) or sharpen more frequently than actually necessary and therefore shorten the expected life of the tool. Generally, hard tooling (punching low carbon steel or aluminum) should be able to produce

30,000 or more parts prior to it needing sharpening. If for any reason, the tooling is not capable of meeting this interval, the Cadrex representative should be consulted to determine if there is additional maintenance necessary to avoid the condition creating the need for more frequent sharpening. A maintenance log is to be maintained to document all tool maintenance and adjustments performed. The Log is to contain at a minimum what tooling maintenance was performed, why it was performed, when it was performed and by whom. This log is to be made available for review by a Cadrex representative upon request. A copy of this log is to be provided to Cadrex when the tooling is returned. Again, tool life should be considered prior to performing any maintenance.

14.1 Electronic and Mechanical Tooling Protection

When Tools and Dies are equipped with either mechanical or electronic tooling protection devices, it is expected the Cadrex supplier will use these devices as designed. Should the supplier choose to operate the tooling without these safeguards in place and properly functioning, the supplier will be held financially responsible for any damage that may occur to the tooling due to their failure to be properly used.

14.2 Tooling Storage

Tooling is to be handled and stored in a manner to protect it from potentially damaging environmental conditions. All tooling supplied or purchased by Cadrex will need to be returned promptly following the completion of the manufacturing agreements. The supplier will be held financially responsible for any tooling or portions thereof not returned promptly when requested at the end of the contract agreements.

14.3 Specialty Tooling

Specialty tooling such as turret or brake tooling, wire crimping tooling, steel rule dies and printing plates as examples, for which Cadrex was charged, will remain the property of Cadrex. This tooling is to be adequately handled, stored and maintained to assure it is in proper working condition. If for any reason, this tooling becomes inoperable, Cadrex is to be notified in writing to develop a plan to determine if and how the tooling is to be repaired or replaced and at who's expense.

Tooling for which Cadrex is charged is to be used solely for the purpose of manufacturing or servicing Cadrex product and is not to be used for any other of the supplier's customers unless authorized to do so in writing by an authorized Cadrex representative.

When requested, tooling is to be returned to Cadrex or Cadrex's authorized agent within a reasonable amount of time to be agreed upon at the time of the request.

Records of this tooling is to be maintained by the Cadrex supplier and may be reviewed upon request.

15.0 Cadrex Standard Sheet Metal Requirements

14.1 Complete detail for both coil and sheet stock material is documented in Cadrex Document ADMWI-0003.03 Standard Sheet Metal Requirements.

16.0 Associated Documents:

ADM-0003 Purchasing Procedure

PRODF-0013 Purchase Order

Cadrex Non-Disclosure Agreement

QAWI-0036 Cadrex Mechanical Workmanship Standard

ADMWI-0003.03 Cadrex Standard Sheet Metal Requirements

ADMWI_0015.1 Supplier Handbook

QAF-0012 Quality Audit

ADMF-0006 Scorecard

ADMFR_0015.2.MX Supplier incident

17.0 Revision History

Revision 1 and 2 Original unreleased revisions

Revision 3 Released document 3/8/2016

Revision 4 Added Revision History clarified verbiage in several sections. Removed the Cadrex Supplier Quality Agreement Acknowledgement Page. Revised section 14.0 to point to Cadrex Sheet Metal Requirements as an independent document. Revised section 5.0 Added section 7.3.1, 13.3 and section 16.0

Revision 5 Added section 8.1, Verbiage changes to 7.4

Revision 6: Tenere Logo removed, Cadrex Logo added, clarified verbiage in several sections: 3.1, 7.1, 7.4 & 12.0, added 7.11 section of supplier code of conduct.

Revision 7: 2.0 Purpose clarified verbiage, 5.0 On time delivery section updated, 12.0 Containment, Corrective and Preventive Action. 15.0 Associated documents updated.

Revision 8: No changes, Doc. Id number reviewed and updated.

Revision 9: 7.0 Counterfeit parts clause added.